

ON THE BIRDS OF THE ADUNG VALLEY, NORTH-EAST BURMA.

BY

N. B. KINNEAR.

[Assistant Keeper, British Museum (Natural History).]

In 1930 Captain Kingdon Ward accompanied by Lord Cranbrook made an expedition to the sources of the Irrawaddy with the object of studying the flora and collecting seeds of plants for introduction into British gardens. In his previous expeditions to Burma and Southern Tibet Captain Kingdon Ward always endeavoured to collect a few birds, but naturally having first to pay attention to plants, only when not engaged in botanizing or seed collecting has he been able to secure birds. Any lack of numbers however, has been made up in the rarity of the specimens secured. For instance, during his 1922 expedition he collected examples of *Tetraophasis szechenzii* in Yunnan and in 1924 obtained both Temminck's Tragopan (*Tragopan temminckii*), and Sclater's Monal (*Lophophorus sclateri*), in Southern Tibet, while in 1926 he got several specimens of the Yunnan Blood Pheasant, a new Trogon (*Pyrotrogon wardi*) in the Seinghku Valley, N. Burma.

In the present expedition Captain Ward was singularly fortunate in having as a companion, Lord Cranbrook, who was able to devote himself almost entirely to collecting zoological specimens. It says a great deal for Lord Cranbrook's zeal as a collector that with no previous experience and only one or two lessons in skinning he brought back some 152 birds, 340 mammals, a number of reptiles—one of which was new—and a collection of insects. Among the mammals four have been found to be new to science and I have described two new races amongst the birds.

The interest in the collection however, does not lie in the discovery of new forms but in the addition to our knowledge of the distribution of certain species. Some of the birds were previously only known from Nepal and Sikkim and N.-W. Yunnan and were unrecorded from any intermediate locality. While others again were known from the Himalayas and Assam, but not from Burma or further East. A number of the species are new to Burma, but exactly how many it is difficult to say definitely. In the second edition of the bird volumes of the *Fauna of British India*, certain species are stated to occur in Burma, but neither Dr. Ticehurst, who has made a very complete bibliography of Burmese birds, nor I, have been able to trace any published record and there are no skins in the Museum from Burma.

The field notes made by Lord Cranbrook are distinguished by a (C) and those by Captain Kingdon Ward with (K. W.). All references to the *Fauna* should be understood as meaning the volumes by Mr. Stuart Baker in the second edition of the *Fauna of British India* series.

Out of the 152 skins in the collection 88 were presented by Lord Cranbrook and Captain Kingdon Ward to the British Museum, the remainder going to the Field Museum, Chicago.

Lord Cranbrook has kindly contributed the following account of the trip and the country visited.

NARRATIVE OF THE EXPEDITION.

BY

LORD CRANBROOK.

The object of Captain Kingdon Ward's 1931 Expedition was, of course, mainly botanical, though we hoped to cross the pass at the head of the

Nam Tamai valley into Tibet, and link up our route with that of any other traveller further north. I was to make as representative a collection as I could of the birds and mammals.

We arrived at Rangoon in November 1930 and proceeded to Myitkyina by train, travelling from there by mules to Fort Hertz, where we arrived on December 16th. Owing to the regulations of the Yunnan Government, Chinese mules working in Burma are not allowed east of the Mali Hka, so after leaving Fort Hertz we had to rely on coolies for transport. As the country is very sparsely inhabited and we were taking stores for a year, it meant that travelling was slow and that we were separated from part of our kit for days at a time, so it says much for the honesty of the inhabitants that, though we had about a hundredweight of coined silver, to say nothing of a case of rum bottles—which even empty were almost priceless to the natives—we never missed anything!

Between the Mali Hka and the Nam Tamai we had to cross three ranges of about 6,000 ft. dropping down to the valleys between each at about 1,500 ft.; the road, a good mule path, running through evergreen hill jungle. Reaching the Tamai on January 7th we travelled up its east bank, arriving at the Adung-Seinghku confluence on the 25th. Up to the time we crossed the last range of hills which separates the Nam Tamai (one of the head waters of the Nmai Hka, or Eastern Irrawaddy) from the last tributary of the Mali Hka, or Western Irrawaddy, we heard or saw Gibbons every day: after crossing the divide some 6,500 ft., we never saw or heard any and the natives told me they were not to be found. This pass is the lowest over the divide until many miles further south in the Triangle, and it would be interesting to find out how far north from the plains near Myitkyina these monkeys go in the valley of the Nmai; the vegetation and climate seem to be exactly the same both sides of the divide.

The Adung-Seinghku confluence (the Tamai from now on changing its name to Adung) is the end of administrative territory and from now we had to rely on native tracks and more primitive bridges. Going was pretty slow as the path was not good for laden coolies: sometimes climbing small cliffs on bamboo ladders or knotted logs, then down amongst the boulders in the river bed with occasional easier places where it crossed cultivated terraces. The houses of the natives were all hidden away in the jungle but signs of inhabitants were not wanting in small patches of cultivated land and occasional 'monkey bridges' over the river. On the fourth day the valley turned to the north and there seemed to be a definite change from typical subtropical hill jungle to forest of a more temperate type. Conifers were quite numerous in the valley bottom and there were a good many deciduous trees: even the fauna seemed to change as above this bend I saw none of the red-bellied *Callosciurus erythraeus* which were so plentiful in the Tamai and Lower Adung, and the long-nosed Squirrels (*Dremomys pernyi* and *D. macmillani*) seemed to take their place. The next day we arrived at Tahawndam, the last village in Burma, which we made our base and where we were to stay for the next three months.

The village itself consisted of three Tibetan families while there were about six Daru families scattered up and down the valley. There was also one family who claimed to be Dalons, of a different race to the Darus and to have come from over the hills to the South (? Taron valley): to my mind they appeared identical with the Darus,—looking the same, clothed the same, just as smelly and dirty and, after their first fear of us—just as friendly.

The Tibetans seemed to do themselves pretty well with a few acres of permanent cultivation round their huts and fair sized herds of yak, sheep, goats, pigs and a few fowls. They plough with yak and grow barley, maize, peas, beans, millet and buckwheat. Although they do not seem to have any fixed rotation they grow two crops a year with an occasional fallow. The leguminous crops are varied from field to field and they spread their litter from the byres on the fields before ploughing. The plough only scratches the surface of the ground, but the fields are thoroughly cultivated and the crops kept moderately clean by hand-hoeing; this latter work being done by the women and Darus. The men do the ploughing which I found not nearly such hard work as using an English balance plough. The hoe used being merely an 'L' shaped branch, sometimes iron-shod, but usually fire hardened. The Tibetan headman hunted takin, goral, serow and barking deer with dogs, shooting

them either with a matchlock or crossbow and poisoned arrows: he was a bad shot with either and must have got very close to kill. They kept no bees but collected wild honey: the early flow (mainly from rhododendrons) is poisonous and like Xenophon's Greeks with their Pontine honey I fell a victim to my greed and one day had to crawl back to camp, fainting at intervals, after a comparatively small helping.

We stayed three months at our base camp until the snow melted enough to allow us to move up the valley. During that time February-May 1931, I made the bulk of the collection of birds and during the last few weeks we were constantly noticing fresh arrivals as the migrants came up the valley. There was also a smaller local movement up the sides, the birds constantly pressing on the rear of the retreating snow.

Our second camp was three days' march, some 14 miles, up the valley at 8,000 ft. At this height there was a great difference in both fauna and flora: the trees were about half Conifers and, to the non-botanist the rest of the forest seemed to be rhododendrons with which the whole valley was ablaze. Voles appeared for the first time, and the shrews and mice were quite different from those at the base camp. Only the monotonous spring call of *Leioptila pulchella caeruleotincta* of the bird noises from down the valley followed us still. While we were here on May 21st two Tibetans crossed the Namnila and when we moved camp again on June 6th we were thinking optimistically of crossing ourselves in the near future. The next two marches brought us within 2 hours of the foot of the pass and we established our top camp at 12,000 ft. by a very pleasant meadow, carpeted at the time of our arrival with flowers and later with a very excellent strawberry. While later there was an even better raspberry. Both these latter unfortunately have refused to grow from seed!

Owing to transport difficulties we had to stay here for three months during which time we got to know the surrounding valleys pretty well. The absence of large mammals was very noticeable though there were much deer droppings in the forest. We were out every day and in all weathers but never saw anything larger than a Weasel (*Mustela subhemachalana*); Pigmy Hares (*Ochotona roylei nepalensis*) and Voles (*Antelomys wardi*) were very common and their runs made amongst the rhododendron, juniper and cotoneaster were everywhere: as these runs were very conspicuous in places where the snow had recently melted I think they must move about under the snow to a certain extent during the winter. We were lucky enough to get two of Temminck's Horned Tragopans, and several Kusier's Blood Pheasants which with some Snow Pigeons were all the fresh meat we were able to get. The Pigeon and Blood Pheasants were pleasantly tame for one shooting for the pot but unfortunately not common: the Tragopans were neither tame nor common. There was also a large red fungus which grew on dead pine trees; this cooked with wild garlic made a very savoury dish. Our cook who, like myself, was out of tobacco used to smoke the dried leaves of an aster: my cravings were not so bad as his so I did not try it, but he assured me that it smoked well. Other local products were an aconite of which the roots were collected by the villagers from lower down used to make arrow-poison, and the bulbs of a fritillary to collect which several gangs of Chinese and Tibetans crossed the pass during our stay: from what I could make out they are a cure to every ill that the flesh is heir to whether taken internally or applied externally to wounds or broken limbs!

As the snow melted we were able to make out more and more of the surrounding country and found that the Adung has its source in a glacier at a height of about 14,000 ft. This glacier, though now in retreat with a typically convex snout, must at one time have gone down the valley almost to its junction with the Seinghku, the sides of the valley being almost entirely free from spurs and in places obviously ice worn.

Meanwhile we had sent repeated requests for coolies to the headman of Tahawndam with no result but excuses, so after some time we persuaded a gang of Chinese root-hunters to take us over the pass though they were apparently too frightened of the Tibetans to promise to take us beyond the first village the other side. We left on September 1st with 10 half loads on a wet misty day. We found the height of the pass to be 15,000 ft. after the usual trouble with the boiling point apparatus in wind and snow: any scientist who could invent a b.p. apparatus in which the water will not all evaporate

before it boils, or will boil before the spirit burns away would earn the gratitude of all travellers in mountainous country!

The path to the pass runs eastward from the foot of the glacier at the head of the valley, and after crossing the pass descends steeply over a stone screen and a snow bed to a lake lying some 1,500 ft. below. Descending steeply it turns north down a stream which rises in three glaciers to the south. The stream is about $\frac{3}{4}$ mile joins another larger stream which rises in two other glaciers to the west and north-west, one of these glaciers being split in two by a slowing down on either side of an enormous pillar of black rock. We had to ford the larger stream which though only knee-deep, ran fast and was extremely cold, after which we reached trees at 13,000 ft. and camped for the night, with smooth ice cliffs rising above our camp on both sides of the valley. The next day we travelled down the combined stream, now running east, to a large open pasture over which yak, sheep and goats grazed, and which swarmed with extremely voracious mosquitoes. The latter had all gone by our return at the end of the month. This was a short easy march through fairly open forest with large luscious raspberries growing in the more open spaces. On September 3rd we marched down the valley in a north-east direction along a good mule path crossing the Shori Chu, a tributary which joins the main river from the west, shortly before halting for the night: a path goes to Drowa Gompa up the Shori and is the direct route from the Adung valley to the Tibetan province of Zayul. The river here turns east and finally at the end of the next day's march, where it is joined by the Lokong Chu, to the south-east, eventually of course to join the Taron. On a shelf, probably the old glacier bed, some 500 ft. above the Lokong confluence and at a height of 10,350 ft. we came to the village of Jite and beyond this we were unable to go. All the able bodied men were away with the cattle at the summer grazing camps, and the old men who were left were not very friendly so in one way or another we could not get transport to go any further. One day I followed the Ridong road, which here leaves the river and runs north-east crossing 3 passes and 2 rivers between Jitte and Ridong, to the top of the first pass, the Lachong La (13,100 ft.), and with that we had to be content.

At the time of our arrival the corn had all been cut and the old men and women were carrying it, each sheaf being tied up with a wisp of straw from which the ears were first carefully cut and put in a basket. The hay too had been cut and was hanging on to the sides of the houses or festooned in the trees to dry—and yet we in England often grumble at a wet hayseal! At this height there was no maize, but barley, oats, peas, turnips and, rather surprisingly, potatoes. The corn was badly rusted, as one might expect with many species of barberry growing round the fields. We had taken no arms with us for fear of offending the religious susceptibilities of the Tibetans, so that collecting was difficult. For the same reason I did not like to set traps, but the cook jumped on a mouse in a granary which I skinned *faute de mieux*, hoping much of my one Tibetan mammal. It turned out to be *Apodemus speciosus latronum* of which I had collected innumerable specimens on the other side of the pass at all heights from 2,000-12,000 ft.

Finally we left for home on September 20th, crossing the Namni La, on which there was a little fresh snow, on the 23rd with some little anxiety for our kit as we had to carry it on ponies to the foot of the pass and the coolies had to make two journeys to bring it over. When the Tibetans left us at our 12,000 ft. camp, Kingdon Ward, the cook and I found ourselves rather stranded as we had only a little food left; so I left Kingdon Ward with the cook to collect his seeds, and, carrying a blanket, a hot water bottle and some food, made my way down to the base camp, sleeping under rocks etc. at night, to send some food up and to wait the return of our other servant whom we had sent back to Fort Hertz with our mail. When I arrived at the base I found that our hut had been buried under a rockslide (fortunately we had stored all our stuff in the headman's granary) so I stayed with one of the Tibetans for a week: board, lodging and service at Rs. 1-8 a day. They fed me plentifully but I found sleeping on the floor in the general heap of grown-ups, children and slaves rather trying and was glad to get away to a new camp at 10,000 ft. where Kingdon Ward joined me on October 19th. We got to our base camp once more on November 2nd and on the 20th we broke camp for the last time and reached Myitkyina on January 1st 1932 after an absence of just over 13 months.

SYSTEMATIC LIST.

BY

N. B. KINNEAR.

Corvus macrorhynchos macrorhynchos Jungle Crow.

156 ♀ October 12, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Crows are recorded several times in Lord Cranbrook and Captain Kingdon Ward's notes but as some of these may refer to Carrion Crows I have not given them. The above specimen is an adult with the wing still in moult and has a bill measuring from base of skull 61.5 mm.

Urocissa erythrorhyncha erythrorhyncha Chinese Red-billed Magpie.

117 ♀ May 22, Adung Valley 28°15' N., 97°46' E., 8,000 ft.

Cissa chinensis chinensis Green Magpie.

6 ♀ January 12, Nam Tami, 4,000 ft.

Caught in a trap baited with meat [C].

Garrulus bispecularis sinensis Chinese Jay.*Garrulus sinensis* Swinhoe, Proc. Zool. Soc. 1871, p. 381—Foochow.

112 ♂ May 20, Adung Valley, 28°15' N., 97°40' E., 8,000 ft.

Shot in fairly thick jungle [C].

This is the bird mentioned as *G. b. rufescens* in the key to *Garrulus bispecularis* in the *Fauna*. As Lord Rothschild has pointed out *G. b. rufescens* Reichenow is a synonym of *G. b. sinensis*. A new record for Burma.

Nucifraga caryocactes yunnanensis Yunnan Nutcracker.

Nucifraga yunnanensis Ingram Bull. B.O.C., xxv, p. 86 (1910)—Mts. of Yunnan.

110 ♂ juv. May, Adung Valley 28°15' N., 97°40' E., 7,500 ft.

Shot on the March, alarm note a harsh croak [C].

Parus monticolus yunnanensis Yunnan Green-backed Tit.

Parus monticolus yunnanensis La Touche Bull. B.O.C., xlii, p. 51 (1921)—S.-E. Yunnan.

32 ♀ February 22, 79 ♂ April 5, 105 ♀ May 13, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Very common. February 28. I don't know whether tits are migratory but the last two days I have seen many more similar to No. 32 than ever before, usually in small parties between four to a dozen [C].

March 6. Attacks the flowers of *Rhododendron tanestylum* and is perhaps responsible for some of the bitten through corallas. March 8. The last bush of *R. tanestylum* is now finished. I saw four tits in it at one time and the corallas were dropping fast. March 9. Very fond of *Rubus lineatus* and the tits are always found there in the early morning. April 11. Almost the commonest bird here is now busy collecting materials for its nest [K. W.].

In Manipur and on Mt. Victoria this race is represented by *P. m. lepeharum* of the Eastern Himalayas.

Lophophanes ater aemodius Himalayan Cole-Tit.

159 ♂ October 22, Adung Valley 28°15' N., 97°45' E., 10,000 ft.

One of a flock of about fifty [C].

This specimen does not differ from Nepal and Sikkim examples. It was obtained by both Rippon and Forrest in Yunnan but has not been found in Burma previously.

Lophophanes rufonuchalis beavani Sikkim Black-Tit.

139 ♂ July 6, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

Shot in jungle; fairly common, habits much like any other tit, but not so

active or acrobatic as some. Also seen in September in Tibet 28°25' N., 97°55' E. [C.].

New to the avifauna of Burma.

Agithaliscus bonvaloti Chinese Black-headed Tit.

26 February 19, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

One of a flock, common [C.].

According to the *Fauna*, this Tit is found in 'Western China, Yunnan and N.-E. Shan States. There are several specimens from the last named place in the British Museum Collection'. Previous to the receipt of the above specimen no examples of this Tit existed in the Museum Collection from anywhere in Burma. Rippon, however, got a number in Yunnan, Gyi-dzin-Shan, Lichiang, etc. and Forrest also collected many examples in the same area.

Sitta europæa nebulosa Nuthatch.

Sitta europæa nebulosa La Touche Bull. B.O.C., xlii, p. 55 (1921)—Mittai, S.-E. Yunnan.

22 ♂ February 17, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Fairly common [C.].

In the *Ibis* 1899, p. 404, La Touche described the nuthatch from Fokien as *Sitta montium* and some years later separated the bird from Mittai, S.-E. Yunnan as *S. e. nebulosa* on account of certain colour differences and larger size. Hartert considers the birds from Yunnan—Lichiang Range to Mittai—and Szechuan to belong to the last mentioned race, but all our specimens from the latter locality are *S. e. sinensis*. There is very little difference in colour between Lichiang and Fokien birds but the former were distinctly larger.

	Wing.	Bill from skull.		Wing.	Bill.
6 ♂	Fokien 72-78	17-5-18-5	13	N.-W. Yunnan	75-84 17-19
3 ♀	Fokien 71-74	16-5-18-5			

The hind claw is said to be larger in *S. e. nebulosa*, but I do not find that a constant character. We have several specimens of the present race in the Museum from the South Shan States collected by Rippon, Thompson, Craddock and Venning but no mention is made in the *Fauna* of this bird occurring there, while the three examples from the Kauri Kachin Hills (Rippon) are apparently recorded as *S. e. nagaensis*. Harington also notes this bird from the same area and said it was plentiful in the hills.

Dryonastes caerulatus kaurensis Kachin Hills Laughing Thrush.

98 ♂ April 23, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

One of a flock of about six [C.].

Rippon collected two specimens east of Bhamo and Harington two a Sinlum. A single male obtained by Forrest on his last trip does not differ from these and I think therefore that *D. e. latrifrons* Rothschild (Shweli-Salwin Divide) must be considered a synonym of *D. e. kaurensis*.

Trochalopteryx erythrocephalus forresti Forrest's Red-headed Laughing-Thrush.

Ianthocincla forresti Rothschild Nov. Zool., xxviii, p. 35 (1921)—Shweli-Salwin Divide.

23 ♀ February 17, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

One of a flock. Crop full of seeds of probably some sort of ivy, also one ant and the pupae of a fly [C.].

Shot a new babbler which goes about in flocks. These birds have several calls; the normal seems to be a sort of hissing whistle on two notes. I surprised a flock in a tree and they flew one by one into the bushes. Then I sat down and one bird came to scout for me and settled on a bush just above my head and on perceiving me gave the warning signal and flew back to the others [K. W.].

I do not understand why Lord Rothschild should consider *forresti* a very distinct species and not a race of *erythrocephalus* since it is very near *T. e. woodi*, only differing in the greener back and darker underside. Forrest obtained specimens on the Shweli-Salwin divide and at Tengyueh and Rippon collected a single example in the Kauri Kachin District in July 1901.

Trochalopteron affine oustaleti Oustalet's Laughing-Thrush.

Ianthocincla affinis oustaleti Hartert Vög. Pau. Fauna, i, p. 633—Tsekou, Yunnan.

45 ♀ March 5; 48 ♂ March 6, Adung Valley 28°10' N., 97°40' E., 6,000 ft.; 115 ♂ May 27, Adung Valley 28°20' N., 97°40' E., 9,000 ft.; 121 ♂ June 12, Adung Valley 28°20' N., 97°40' E., 8,000 ft.; 122 ♀ June 8, 137 ♂ July 4, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

45 not uncommon. Usually goes about in flocks, sometimes singly. Rather silent and wary. 48 shot in low undergrowth, singing somewhat mournfully and extremely monotonously by himself. The song is only four notes constantly repeated. 115, 121. Common. 137 shot in forest, common. This bird goes right up to the limit of trees, but I have never seen it in the scrub higher up, though there is a pair in the last isolated patch of forest. Seen also during September in Tibet 28°25' N., 97°55' E. [C.].

45 crop contained 50 seeds of *Rubus* and over 50 of *Gaultheria* besides other seeds and remains of at least one beetle. 48 seeds of *Viburnum* (9223), 8 of *Rubus lineatus* and over 50 of *Gaultheria* (9248) [K. W.].

From *T. a. affine* this race differs in the darker head—in some examples black, in others blackish brown—less rufescent back and paler underside which is distinctly greyer. It is found in northern Yunnan and east to N.-W. Szechuan. 13 ♂ wing 102-118, 11 ♀ wing 101-109.

Trochalopteron subunicolor griseata The Yunnan Plain-coloured Laughing Thrush.

Ianthocincla subunicolor griseata Roths. Nov. Zool., xxviii, p. 33 (1921)—Shweli-Salwin Divide.

124 ♂, 125 ♀ June 13, Adung Valley 28°20' N., 97°40' E., 13,000 ft.

Over Alpine Meadow. Iris yellow.

June 13. A new Babbler, with speckled breast, along with its mate was hopping in and out through the bushes after *Rubus* berries. From time to time they hopped up onto the top of a *Rubus* bush and getting the two in line I secured both [K. W.].

This race of the Plain-coloured Laughing Thrush was described by Lord Rothschild in 1921 from five specimens collected by Forrest on the Shweli-Salwin Divide in August 1919. It differs from the typical bird in the more olive and less rufous colour of the upper parts, especially on the rump, darker slaty head, darker throat and paler breast and abdomen, the feathers of which have larger squamations.

Ianthocincla s. subunicolor was described from Nepal and ranges east to the Dibang River, while the present race is known from the Adung Valley and the Tengyueh District and Shweli-Salwin Divide in Yunnan. It is a bird of high altitudes and Forrest did not find it below 7,000 ft.

Measurements of *T. s. griseata* 3 ♂ 92-95; 2 no sex 95; 1 ♀ 95.

T. s. subunicolor 1 ♀ 87, no sex 87-94.

Grammatoptila striata cranbrookii Cranbrook's Striated Laughing Thrush.

Grammatoptila striata cranbrookii Kinnear, Bull. B.O.C.

7 ♂ January 28, Nami Tami, 4,000 ft., 90 ♀ April 16, 99 ♂, 113 ♂ April 24, Adung Valley 28°10' N., 97°40' E., 6,000-8,000 ft.

No. 7 shot in bamboo forest, goes about in flocks but often seen singly. Fairly common, alarm note like a blackbird when alone [C.].

No 90. Crop full of seeds, almost entirely *Rubus lineatus* and a few of *Gantheria* [K. W.].

The Striated Laughing Thrush has not previously been recorded from Burma, though in Assam it is said to be found as far east as Margherita.

These four specimens are darker on the mantle and rump than in *G. s. austeni* and in size run larger.

	Wing.	Bill from Skull.	Tail.
10 ♂ Dafia Hills	137-145	29-31.5	120-129
3 ♂ Nami Tami & Adung Valley.	141-152	31-32	120-135
3 ♀ Dafia Hills	136-143	31	127-130
1 ♀ Adung Valley	152	31	135

Fulvetta vinipectus bieti Yunnan Fulvetta.

Alcippe (Proparus) bieti Oustalet, Ann. Sci. Nat. (ser. 7), xii, p. 283, pl. ix (1892)—Ta-Tsien-lou.

25 ♀ February 18, 47 ♀ March 5, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

No. 25. Brought in by a small boy, who shot it with a crossbow. Crop contained small seeds. No. 47. Very common goes about in flocks chattering continuously and methodically searching low trees and undergrowth [C.].

These birds agree with a series collected by Forrest on the Lichiang Range Lat. 27°20' N. in Yunnan.

Leioptila pulchella coeruleotincta Yunnan Beautiful Sibia.

Leioptila pulchella coeruleotincta Rothschild Nov. Zool., xxviii, p. 38 (1921)—Shweli-Salwin Divide.

8 ♀ January 28, Tamai Valley 4,000 ft., 24 ♂, February 18, 37 ♂ February 24, 58 ♂ March 11, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

No. 8. Shot sitting high up on a dead tree. One of a flock of about eight or ten.

No. 24. Goes about mainly in flocks, occasionally singly. Makes a continual chattering while searching trees and shrubs and often sits up in the top branches of a dead tree. Very common. No. 37. This bird had its breast covered with *Rhododendron* pollen like many at this time, making a broad yellow streak down its breast, so that it looked like a different species altogether. Small parties often sit on clusters of *rhododendron* flowers putting their beaks right down inside and probably do a good deal towards fertilizing the flowers. During the last week or so this bird has developed a somewhat annoying call rather like a redshank's but with three other notes of the same harshness introduced [C.].

February 24. At last I shot the five-note bird we hear every morning and it turned out to be the Yunnan Beautiful Sibia. Its throat was yellow, feathers yellow-tipped as I thought, like the first one I saw in a few days ago, which was uttering a very different cry. This yellow however was the pollen from *Rhododendron tanestylum* and I watched a bird put its head inside the flowers to suck the honey apparently. Often sits on the top-most twig of a tree surveying the landscape for a few minutes on end. It is rather the buffoon amongst birds, has as many calls as a starling and is a very cheerful bird [K. W.].

This Sibia is another of Forrest's discoveries in north-west Yunnan, where it is not uncommon. From the Beautiful Sibia *L. p. pulchella*, inhabiting the Naga, Nuri and Daffa Hills, it is distinguished by the bluish-grey colour of the underside.

Actinodura nipalensis wardi Ward's Bar-wing.

Actinodura nipalensis wardi Kinnear Bull. B.O.C., liii, p. 79 (1932)—Adung Valley.

71 ♂ March 27, 85 ♂ April 13, Adung Valley 28°10' N., 97°40' E.

71. Seen alone, breast covered with *rhododendron* pollen. I have not seen this bird down in the valley. 85 shot in low bamboo: one of a pair [C.]. In the gizzard of No. 71 I found only plant remains (probably moss). No. 85 had seeds in gizzard, mostly *Rubus lineatus*, one of *Ardesia* and a few insect remains [K. W.].

This new race of Bar-wing differs from *A. n. waldeni* Godwin-Austen (Japvo Peak, Naga Hills) in the darker colouration of the back, blacker crest and richer brown on the underside.

A. n. waldeni is found on Japvo and Khunho Peaks in the Naga Hills and Owenkulno Peak in Manipur and further south on Mt. Victoria is a very doubtfully distinct race *A. n. poliotis* in which the only difference seems to be that the crest is darker. To say that *A. n. poliotis* is much darker than *waldeni*, as we read in the *Fauna*, is not in accordance with the specimens in the British Museum. From Yunnan Lord Rothschild has described a further race *A. n. saturator* (Shweli-Salwin Divide) which differs from *cranbrookii* in the presence of pale edges to the feathers of the crest, mantle and underparts, the crest too is paler and the barring more pronounced.

There is in Calcutta a specimen of *Astinodura nepalensis* collected by Anderson at Ponsee which may be this race or *saturator*.

***Yuhina gularis griseotincta* Yunnan Yuhina.**

Yuhina gularis griseotincta Rothschild, Nov. Zool., xxviii, p. 42 (1921)—Shweli-Salwin Divide.

64 ♀ March 14, Adung Valley 28°10' N., 97°40' E., 8,000 ft., 118 ♀ March 30, 28°10' N., 97°40' E., 6,000 ft.

Shot in low bamboo forest [C.]. Had *Rhododendron grande* pollen on breast feathers [K. W.].

The name *Yuhina yangpiensis* was given by Sharpe (Bull. B.O.C., xiii, p. 12, 1902) to a single specimen collected by Colonel Rippon on the Yangpi-Talifu Road, W. Yunnan on 22 March 1902 and given to the Museum in 1903. Apparently Rippon got no further specimens, at least there are none in the Museum, but two years later in 1904 he made a collection on Mt. Victoria and secured a series of a *Yuhina* in March and April which are quite indistinguishable from the type of '*yangpiensis*' and moreover I can see no difference between them and the typical form from Nepal. In 1921 Lord Rothschild described *Y. g. griseotincta* which differs from *Y. g. gularis* in having the sides of the head and neck greyer, the throat and chest more vinaceous.

***Ixulus flavicollis rouxi* Chestnut-naped Ixulus.**

Ixulus rouxi Oustalet, Bull. Mus. Paris, ii, p. 186 (1896)—Ly-Sien-Kiang, Yunnan.

15 ♂ February, Adung Valley 28°10' N., 97°40' E., 8,000 ft.; 86 ♂ April 14, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Very common, goes about in flocks methodically searching bushes and trees keeping up a continual chatter all the time [C.].

I can see no difference between examples from Sinlum, Bhamo Hills, from where Harington's *I. f. harterti* was described, and specimens from Yunnan. This species has a wide range and extends from Tonkin to Yunnan, Mt. Victoria and S. Assam. Harington recorded the Chestnut-naped *Ixulus* as fairly common near Bhamo and Rippon also obtained it there.

***Leiothrix lutea yunnanensis* Yunnan Red-billed Leiothrix.**

76 ♀ April 3, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

I have not seen this bird until two days ago, but it seems to be fairly common [C.].

Harington records this race in the Bhamo District and Anderson got six examples from near Ponsee.

***Peruthius æonobarbes melanotis* Chestnut-headed Shrike-Babbler.**

33 ♂ February 22, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Fairly common; goes about in flocks [C.].

In the *Fauna*, *P. a. melanotis* Hodgson is given as ranging from Nepal to Manipur and *P. a. intermedius* Hume (Mooleyit) the Eastern hills of Burma from Bhamo to Tenasserim. This distribution is not however confirmed by the specimens in the British Museum. Of the former there are examples from Nepal, Sikkim, Naga Hills, Manipur, N. Chin Hills, Mt. Victoria, Kauri Kachin District (Rippon), Shweli-Salwin Divide (Forrest), Loi Pangnan, W. of Mekong, S. Shan States (Craddock) and a single ♂ from Ngoi, Toi, Tonkin (Stevens). Of *P. a. intermedius* there are specimens from Mooleyit, Thoungyeen, Tonghoo, Loi Maw, Kentung, S. Shan States (Rippon), Chapa, Fan-si-pan, Tonkin (Delacour). It appears therefore that the S. Shan States and northern Tonkin are the meeting places of the two races, but there is no sign amongst the few specimens examined of intergradation. In addition to the specimens mentioned above of *P. a. melanotis* Harington collected three birds near Bhamo.

***Myzornis pyrrhoura* Fire-tailed Myzornis.**

73 ♀ March 28, Adung Valley 28°10' N., 97°40' E., 8,000 ft.

Goes about in flocks, chattering and methodically searching bushes and low trees, sometimes makes flights like a flycatcher. Common here but I have not seen it in the valley. Breast covered with *Rhododendron* pollen [C.].

In the *Fauna* the distribution of this species is given as Nepal and Sikkim, but in 1901 Oustalet recorded an example from Tsékou and more recently it has been collected by Forrest in Yunnan.

Microscelis leucocephalus leucocephalus Chinese Black Bulbul.

77 ♂, 78 ♂ April 3, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

One of a party of three which by their behaviour were two males in pursuit of a female. I have not noticed them before. No. 78 had the gizzard full of large seeds. Also seen in May at 8,000 ft. [C.].

Rothschild and Streseman have shown that the race of this Bulbul in China polychromatic (Nov. Zool. 1926, xxxiii, pp. 301-2 and Ornith Monatsb. 1923, pp. 83-5) and in Yunnan is found in four different phases. These two birds belong to the *sinensis* phase with glossy black locks and crests which has not been recorded from Burma before.

Ixos maclellandi similis The Yunnan Bulbul.

Hemixus maclellandi similis Rothschild.

103 ♂ May 3, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

One of a pair [C.].

This specimen has rather more chestnut-brown on the cheeks, sides of neck and breast than the majority of birds from N.-W. Yunnan, though one from Gyi-dzin-Shan, E. of Talifu is similar. Rippon obtained examples in the Kauri Kachin District at over 5,000 ft.

Pycnonotus aurigaster xanthorrous Anderson's Yellow-vented Bulbul.

36 February 24, Adung Valley 28°10' N., 97°40' E., 104 ♂ May 4, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Fairly common [C.].

Certhia familiaris khamensis Tibetan Tree-Creeper.

130 ♂ June 25, Adung Valley 28°20' N., 97°45' E., 13,000 ft.

A bird seen in September in Tibet 28°25' N., 97°55' E., probably also belonged to this species [C.].

Harington observed Tree-Creepers which he took to be *C. f. nipalensis* in the Kachin hills which doubtless belonged to this race as Baker suggests, but this is the first actual record.

Troglodytes troglodytes taliuensis Yunnan Wren.

56 ♂ March 9, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Sharpe described this bird from an example collected by Rippon at Gyi-dzin-Shan, East of Talifu in Yunnan. This specimen is an exceptionally pale bird with the white spots on the wing coverts larger than usual. The Yunnan series only differs from Nepal and Sikkim examples in the rather paler under-side.

In the *Fauna*, Baker includes the Shan States in the distribution of this Wren, but the only skins in the Museum collection are from Yunnan.

Oligura castaneo-coronata Chestnut-headed Wren.

111 ♂ May 19, 1931, Adung Valley 28°15' N., 97°40' E., 8,000 ft.

Shot in fairly thick forest, very common here and seen occasionally down at 6,000 ft. [C.].

In the *Fauna* the distribution of this bird is said to be Himalayas from Garhwal to the extreme East of Assam: the Khasia, Naga and Cachar Hills South of the Brahmaputra but not recorded from Manipur or further South or East. There is however in the British Museum a series collected by Rippon on Mt. Victoria, four examples from Loi Maw, S. Shan States (Rippon) and several from N.-W. Yunnan, Lichiang Range (Forrest). I can see no difference in colour between Himalayan examples and those from Burma but in size the Yunnan and S. Shan States birds run large.

4 ♂ Yunnan 52-55 mm.
1 ♀ 50
4—Shan States 53-55.
Mt. Victoria 9 47-50 mm.

Sikkim 1 ♂ 49
1 ♀ 50 mm.
5—46-52

Cinclus pallasi marila Formosan Brown Dipper.

44 ♀ March 4, 89 ♀ April 15, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

44. Fairly common. Always seen along the river, standing on stones and diving for food. I have seen it dive off a rock about a foot above the water level, but usually from the edge of the water. Swims a little occasionally and I have once seen it dive when swimming. Very weary and shy; call like our ouzel at home.

89. Lately seen in greater numbers. I have seen it swimming in a rapid stream—about a six knot current—deliberately alight on the water and swim a considerable distance to land [C.].

There is no difference in colour in the Brown Dippers found from Assam to Formosa, though in size they vary considerably, but unfortunately we have not a good series of sexed birds from the extremes of the bird's range.

10 ♂ Fokien and Shensi	109-117 mm.	♀ Szechuan	117, prob-
1 ♂ S. Shan States	109 mm.		ably wrongly sexed.
2 ♂ Assam	100-102 mm.	2 ♀ Adung Valley and	
17 ♀ Fokien, Chekiang		Assam	100-102 mm.
and Shensi	105-110 mm.	1 ♀ Formosa	96 mm.

For the large Chinese bird the name *soulie* Oustalet, type locality Ta-tsien-lu, is available and for that from Formosa *marila* of Swinhoe. Without further material it is impossible to decide whether the Assam and Formosa birds are different and for the present they must be treated as the same. In the *Ibis* 1907, p. 177, Messrs. Grant and La Touche state that the young of *soulei* can be distinguished from *marila* by the different colour of the crossbars on the underside but from the material in the Museum this does not appear to be the case.

Rhodophila ferrea haringtoni Eastern Dark-grey Bush-Chat.

92 ♂ April 17, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

I have not seen this bird before [C.].

Harington found this species breeding near Bhamo and Rippon collected a young bird.

This is an unsatisfactory race and further breeding birds are wanted from South China. Hartert (Vög. Päl. *Fauna*, vol. i, p. 711) separated the Eastern bird from that of the Himalayas on account of the length of the tail which in *O. ferrea ferrea* he gives as 63-68 mm. as against 57-61.5 in *O. f. haringtoni*. Baker, however, in the *Fauna* points out an additional difference and says that *O. f. haringtoni* is distinguished 'in being whiter below at all seasons of the year, in summer the breast and abdomen are almost pure white.' After examining a large series I can see no difference in the colour of freshly moulted autumn birds from S. China and the Himalayas, but in the spring and summer when the plumage is abraded, western birds—the reverse of what Mr. Baker says—are certainly very white below but unfortunately we have practically no birds at this season of the year from S. China.

The measurements of the tails of the series of males examined is:

21 Simla, Sikkim, Manipur	59-65
4 Arakan and Chin Hills	58-65
7 Karen Hills	56-60
10 Yunnan	55-61
3 Szechuan	53-58
11 S. China	56-60

The type of *O. f. haringtoni* was collected at Lieng-Kiang near Foochow on January 18 and not at Moupin, as stated in the *Fauna*.

Microcichla scouleri scouleri Little Forktail.

38 ♂ February 26, Adung Valley 28°10' N., 98°40' E., 6,000 ft.

Not uncommon; always seen by water running about on the stones like a wagtail. Usually on the smaller streams [C.].

There are specimens in the Museum from Nepal, Sikkim, Bhutan, Assam, the Miri and Dafla Hills and Tonkin but none from Northern Burma and the Shan States, where, according to the *Fauna*, it occurs.

Phoenicurus frontalis Blue-fronted Redstart.

20 ♂ February 14, Adung Valley 28°10' N., 97°40' E., 6,000 ft. 49 ♂ March 6, Adung Valley 28°10' N., 97°40' E., 6,000 ft. Common [C.].

This species was found quite common in Yunnan by Rippon and Forrest where it apparently breeds since the latter collected a juvenile unable to fly.

After comparing Sikkim birds with those from Szechuan and Kansu I can see no difference and therefore Hartert's *P. frontalis sinæ* becomes a synonym.

Rhyacornis fuliginosa fuliginosa Plumbeous Redstart.

29 ♂ February 20, 66 ♀ March 21, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Shot by the River. Very common, sitting on stones hawking flies like a flycatcher and spending a certain amount of its time on trees and bushes by the river bank. When other birds have gone to roost it is still active and at this time of the day has a habit of flying almost vertically up into the air some 15 or 20 ft., then swooping down on a large spiral to its original position. Kingdon Ward has seen one dive into the water when in flight, like a kingfisher [C.].

Harington found this species breeding in the Bhamo area.

Chaimarrornis leucocephalus White-capped Redstart.

10 ? February 5, Adung Valley 25°20' N., 97°45' E., 5,000 ft.; 146 ? July 15, Adung Valley 28°20' N., 97°40' E., 13,000 ft.

10. Shot by river. Sits on stones in and by the river flicking its tail and hawking flies like a flycatcher. Periodically it runs under stones and occasionally flies up into trees and bushes on the river bank but not often. Fairly common, each pair seems to keep to its own stretch of water—six to eight hundred yards. White patch in the sunlight shows up like a piece of burnished tin. 146. Fairly common; seen on any stream up to 14,000 ft.

Grandala caelicolor florentes The Chinese Grandala.

Grandala caelicolor florentes Bangs, Proc. New Eng. Zool. Club., ix, p. 77 (1926)—Tachienlu.

16 ♂, 17 ♀ February 13, Adung Valley, 6,000 ft.

Both killed at one shot fired at a large flock sitting on the topmost branches of a high tree. Occasionally a dozen or so birds would leave the flock circle round swooping up and down, then return to the main body and settle again. Crops contained fruits and seeds of *Vaccinium* [C.].

This race was separated by Bangs on account of the smaller size and brighter blue colour of the male. In regard to the colour I find that this appears to be due to structural alteration to the feather caused by wear. A February and a May specimen from Sikkim cannot be distinguished from three males from Chuan chee obtained in May and June but January and December birds from the later locality are much darker. Hodgson's type is apparently a spring bird. The difference in size holds good.

6 ♂ <i>G. c. florentes</i>	131-136	10 ♂ <i>G. c. caelicolor</i>	146-150
4 ♀ „	137-144	♀ „	135-144

Calliope tschebaiewi Tibet Ruby-Throat.

135 ♂ July 2, 140 ♀, July 6, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

135 shot in low rhododendron scrub above tree line. Rather fond of sitting on rocks above scrub level. 140. This bird is the mate of 135—they both have the same rather metallic call. On June 25, I saw this species in rhododendron scrub at 14,500 ft. [C.].

July 12. A young bird in full fledged but not able to fly very strongly, seen at 12,000 ft. I think, judging by the behaviour of some old birds near, it was the young of *C. tschebaiewi* [C.].

According to the *Fauna*, this species breeds in N. Burma and in winter is found throughout the Burmese hills. There are no specimens in the Museum from any locality in Burma.

Tarsiger chrysæus chrysæus Golden Bush-Robin.

144 ♂ July 12, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

Shot in forest; not very common [C.].

Harrington records a specimen from the Bhamo District and it is not uncommon on the Yunnan Mountains.

Ianthia cyanura rufiliata Red-flanked Bush-Robin.

50 ♀ March 17, Adung Valley 28°10' N., 97°40' E., 6,000 ft.; 158 ♀ October 22, Adung Valley 28°15' N., 97°45' E., 10,000 ft.

50. Not very common; sits on low bushes hawking flies and hops about under them like a Robin. 158. Shot in forest, also seen at 12,000 ft. [C.]. These two birds do not differ from typical examples from Nepal and Sikkim. I cannot distinguish *I. practica* Bangs and Phillips from Loukouchai.

Turdus atrogularis Black-throated Thrush.

55 ♂ March 9, 63 ♂ March 13, 68 ♂ March 23, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

No. 55 not seen before, No. 68 not common but occasionally seen; always alone [C.].

No. 55 crop full of big larvae, beetles etc.; No. 63 crop contained a whole snail, beetles, larvae etc. no seeds [K. W.].

Turdus ruficollis Red-throated Thrush.

57 ♂ March 31, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Shot in fairly open country. I have not noticed this bird before [C.]. Crop full of larvae, beetles etc. [K. W.].

This thrush has not been recorded from Burma before, the statement in the *Fauna* that it occurs in Northern Burma is probably based on two or three specimens in the Museum collected by Rippon in Yunnan, but wrongly labelled Kauri Kachin District.

Oreocincla dixonii Long-tailed Mountain-Thrush.

Turdus dixonii Seeborn Cat. Birds British Museum v. p. 161, 1881.

150 ♂ August 12, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

Shot in forest; the first of this species I have noticed here, two days later I saw the same species in the scrub just above the tree line [C.].

In the *Fauna* this species is confused with *O. mollissima* and for the differences between the two see Ibis 1930, p. 579.

We have in the Museum specimens of this thrush as follows. Karen-nee vi (Ramsay), 2 Na Noi, S. Shan States, iii (Rippon), 2 S. Shan States (Thompson and Craddock), Chapa, Tonkin, xii (Delacour), 2 Lichiang Range, viii, x (Forrest), Chanting-Yangpi Road, Yunnan, viii (Rippon) Asalu, ii (Godwin Austen), Manipur (Hume), Darjeeling and Nepal (Hodgson).

Myiophonus temminckii eugeniae Burmese Whistling Thrush.

157 ♂ October 21, Adung Valley 28°15' N., 97°45' E., 10,000 ft.

We have no specimens of this bird from N.-E. Burma, though over the border it is not uncommon in Yunnan. The correct spelling of the generic name of this bird is *Myiophonus* and not *Myophonus* in spite of the note in the Corrigenda volume to the *Fauna*.

Prunella collaris ripponi Rippon's Accentor.

14 ♂ February 10, 42 ♂ March 3, 70 ♂ March 26, Adung Valley 28°10' N., 97°40' E., 8,000 ft.

No. 14 shot and brought in by a native. I had not noticed this bird although the native got it in the open country. Crop contained a good many small seeds including those of grasses. No. 42 brought in by a small boy. Not uncommon in open country and among low bushes. No. 70 one of a flock of about a dozen working about in open country and periodically flying all together for a short distance and then scattering and searching the dead grass and bracken, every now and again getting on top of a boulder to have a look round [C.].

Prunella strophciata multistriata David's Accentor.

46 ♂ May 5, 59 ♂ May 12, Adung Valley 28°10' N., 97°40' E., 6,000 ft. Not uncommon, habits like a robin hopping about under and amongst low bushes. A chattering alarm note [C.].

Originally described from Moupin, this accentor is not uncommon in N.-W. Yunnan, but has not before been noted so far west previously.

Prunella immaculata Maroon-backed Accentor.

12 ♂ February 9, 344 ♀ February 22, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Goes about in small parties in fairly open country searching under leaves and in low bushes; fairly common [C.].

This accentor ranges from Nepal eastward along the Himalaya to Szechuan and south to Yunnan—the Mekong-Salween Divide etc. It has not been previously recorded from Burma.

Hemichelidon sibirica rothschildi Yunnan Sooty Flycatcher.

148 ♂ July 22, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

Shot in the forest, not uncommon [C.].

This race was described from birds collected by Forrest in the Tengyueh District and the Lichiang Range. The specimen from the Shan States—presumably the bird collected by Rippon East of Stedman, S. Shan States but no details are given—mentioned by Baker in the *Fauna* as belonging to this race appears to me to be indistinguishable from Himalayan examples. Bailey however shot a male at Sangachu Dzong, S.-E. Tibet in June.

Siphia strophciata strophciata Orange-gorgeted Flycatcher.

97 ♂ April 22, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Not seen before during this month. Flight and habits like a Robin [C.].

Forrest and Rippon collected numerous specimens in Yunnan and Anderson obtained a male at Ponsee while Harington shot a single example in the Bhamo District.

Muscicapula saphira Sapphire-headed Flycatcher.

97 ♂ April 22, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Shot in fairly open country, not seen before [C.].

Anderson got a specimen in April at Ponsee and Forrest several examples in the Salwin Valley latitude 25°20' N. Three Burmese birds in the Museum do not differ from typical Nepal and Sikkim skins though they run larger.

7 ♂ Sikkim and Naga Hills 59-62.5 mm.

3 ♂ Salwin and Adung Valley and S. Shan States. 63-64 mm.

Eumyias thalassina thalassina Verditer Flycatcher.

81 ♂ April 8, 88 ♂ April 13, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Not seen before April 8, but fairly common afterwards [C.].

True *Eumyias thalassina thalassina* (olim *Stoparola melanops*) is found from Nepal and Sikkim through Assam, Burma, part of Assam down to S. Annam, and has no black line at the base of the bill, whereas in 90 per cent. of the birds from the Malay Peninsula and Borneo it is present. In addition these southern birds are smaller.

Wing.

8 ♂ Malay Peninsula	71-77 mm.
2 ♂ Borneo	75-77 mm.
4 ♂ S. Annam	85-88 mm.
5 ♂ S. Shan States and Karaneé	86-89 mm.
7 ♂ Sikkim	81-87 mm.

Culicicapa ceylonensis ceylonensis Grey-headed Flycatcher.

102 ♀ May 3, 1931 Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Fairly common, but not seen until about ten days ago [C.].

Harington found this flycatcher common at Bhamo.

Chelidorhynch hypoxantha Yellow-bellied Flycatcher.

127 ? June 21, 132 ♂ June 27, Adung Valley 28°20' N., 97°45' E., 12,000 ft. Also seen in September in Tibet 28°25' N., 97°55' E. [C.].

Breeds commonly in the Bharno district according to Harington and Forrest found it common in Yunnan.

Pericrocotus brevirostris affinis Assam Short-billed Minivet.

109 ♂ May 16, Adung Valley 20°15' N., 97°40' E., 7,500 ft.

Killed by a coolie with a stone [C.] 10 April, saw a flock of six scarlet minivets today [K. W.].

The single male minivet listed above, two males collected by Rippon in the Kauri Kachin District and one by Anderson on the Taping R., Kachyen Hills agree with birds from Assam and Sikkim. Unfortunately we have no good skins of females from the first two localities to compare with topotypical *P. b. affinis*, but they are sufficient to show that they are not *P. b. styani* Baker (Szechuan), if indeed that race can be distinguished from *P. b. ethelodus* Thayer and Bangs (Hupeh). Four females from Mt. Victoria are very rich yellow below and grey on the back, wanting the greenish tinge in Assam birds. A Manipur female is much the same and so too is one from Taungyi, S. Shan States while another from 'S. Shan States' (Rippon) does not differ from the Assam examples. A single female from Fort Stedman (Rippon) is paler on the back than typical *affinis* but with the same greenish yellow rump to the female of Baker's *P. b. ripponi*, the supposed male of which was collected by Rippon at the same time and place. This 'male' is not sexed and there is no evidence to show that it is a male—indeed I should say it was a female abnormally coloured. It differs from the normal female in the darker back and on the yellow replaced by reddish orange. From the normal male it differs in not having a black throat, no black on the upper surface and the scarlet replaced by reddish orange. Furthermore it has a reddish orange band on the forehead which is not found in any minivet. There is a very similar bird, rather more orange, also collected by Rippon, from the Kauri Kachin District in July 1901. These birds are indeed very similar to some of the females of *P. b. annamensis* Robinson and Kloss from Dalat, S. Annam.

Pericrocotus solaris solaris Yellow-throated Minivet.

9 ♂ January 31, Nam Tamai Valley N.-E. Burma, 4,000 ft.
Spiders and beetles in crop [C.].

Dicrurus leucophæus hopwoodi Assam Grey Drongo.

95 ♂ April 19, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Habits like any drongo, sits on the bare branch of a high tree hawking flies etc. Very wary, I have been trying to get one for the last two months. Not uncommon; there seems to be more about this last month [C.].

Tribuna thoracica thoracica Spotted Bush-Warbler.

134 ♂ July 3, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

Shot in low scrub jungle above tree line, common [C.].

Godwin-Austen obtained this species in Sylhet and apparently it has not been found further east within Indian limits, though in Yunnan Forrest collected specimens on the Mekong-Salwin Divide and the Lichiang Range.

Phylloscopus pulcher pulcher Nepal Orange-barred Willow-Warbler.

136 ♀ July 3, 1931, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

Shot in jungle, very common [C.].

Phylloscopus magnirostris Large-billed Willow-Warbler.

120 ♂ June 4, Adung Valley 28°20' N., 97°40' E., 9,000 ft.

Common [C.].

Phylloscopus inornatus inornatus Crowned Willow-Warbler.

84 ♂ April 10, Adung Valley 28°10' N., 97°40' E., 6,000 ft.; 149 ♀ August 10, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

Anderson collected specimens at Bharno and Pensee.

Abroscopus schisticeps ripponi Sharp's Flycatcher Warbler.

54 ♀ March 8, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Shot with a crossbow, common, goes about in flocks methodically searching bushes, sometimes going up trees, particularly those covered with creepers, then flying down together one after the other like a lot of falling leaves, make a continual chattering [C.].

Rippon and Forrest found this bird common in N.-W. Yunnan.

Perissospiza icteroides affinis Allied Grosbeak.

133 ♀ juv. June 28, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

One of a pair; the other presumably the male had a very attractive golden yellow breast—both made rather a pleasant bell-like call [C.].

July 13. Watched one hopping about on the grass under bushes, picking up seeds. It was quite close to me and did not appear afraid [K. W.].

Not recorded from Burma before, though Forrest and Rock found it not uncommon on the Lichiang Range and Bailey obtained a male on June 19, 1911, at La Gyap 13,500 ft., E.-E. Tibet latitude 28°50' N., longitude 98° E.

Perissospiza carnipes carnipes White-winged Grosbeak.

151 ♀, 151a ♀ juv., August 14, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

Eats the blue *Gaultheria* berries [K. W.].

According to the *Fauna* this Grosbeak is not known further east than 'the hills north of the Brahmaputra in Assam'. Both Rippon, Forrest and Rock met with it in N.-W. Yunnan.

Pyrrhula erythaca Beavan's Bullfinch.

123 ♂ June 13, 138 ♂, July 8, Adung Valley 28°20' N., 97°45' E., 12,000 ft.

Shot in *Abies* forest; June 23, four seen [K. W.]. Not uncommon [C.].

It is very doubtful whether *P. e. altera* Rippon—Yunnan—can be kept distinct from *P. erythaca erythaca*—Sikkim—since the only difference in colour appears to be that in Sikkim males the red on the breast is suffused with yellow, while in birds from Yunnan the yellowish tinge is wanting. In size Yunnan birds run rather larger 8 ♂ 82-87 mm. as against 7 ♂ from Sikkim 80-84.5 mm. We have no females of the typical form and I have not been able to hear of one in any collection. According to the *Fauna* Bullfinches of this type have been seen in the N. Shan States.

Pyrrhula nepalensis ricketti Rickett's Bullfinch.

Pyrrhula ricketti La Touche Bull. B.O.C., xvi, p. 21 (1905)—Mts. of N.-W. Fokien.

93 ♀, 94 ♂, April 18, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

A pair not seen before [C.].

These two specimens agree with a series from Fokien. Forrest obtained examples in N.-W. Yunnan. This race is distinguished from *P. n. victorise* by the darker colour of the back and more scaly appearance of the feathers of the head. It is new to Burma.

Carpodacus erythrinus roseatus Common Indian Rose-Finch.

106 ♂ May 13, Adung Valley 28°10' N., 97°40' E., 7,500 ft.

Not uncommon, shot with a crossbow [C.].

Spinus tibetanus Tibetan Siskin.

51 ♂, 52?, 53 ♀, March 8, Adung Valley 28°20' N., 97°40' E., 6,600 ft.

Shot out of a flock of about forty or fifty wheeling about not very high up. I killed a fourth—a female—but it was too badly shot to preserve. Crops full of small seeds and quartz grains. I have not noticed this bird before [C.].

The Tibetan Siskin, originally described from the borders of Sikkim and Tibet, was for long only known from that area. In 1926 Lord Rothschild recorded in the *Novitates Zoologicae*, xxxiii, p. 332, a male from the Lichiang Range, Yunnan, collected by Forrest and in 1931 Dr. Rock obtained a pair on Gyi-na-loko in the autumn.

In the *Fauna* it is stated that Whympers and Ward's collectors procured a nest in Ladak, but the species is not included in Colonel Ward's list of birds of Kashmir and I think there must be some mistake. Moreover Ladak has been carefully worked by a number of Ornithologists within recent years and no one seems to have met with it. As pine forests do not exist in Ladak it is most unlikely that a bird like a Siskin would be found there.

Passer rutilans intensior Yunnan Cinnamon Sparrow.

60 ♀, 61 ♂, 62 ♂, March 13, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Shot just before sundown as the flock was going to roost in a high leafy tree. They were behaving much the same and making a similar noise as sparrows going to roost at home. Occasionally the whole flock—about 15-20 birds—would leave the tree, circle round once or twice and then go back and sit chattering and moving about on the tree once more. I have not noticed this bird before [C.].

Fringillauda nemoricola nemoricola Hodgson's Mountain Finch.

30 ♀, 31 ♂, February, 43 ♂ March 3, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

No. 30. One of a flock of about twenty feeding on cultivated land lying fallow. While feeding the whole flock would rise together, wheel round in the air once or twice and again go down on the ground or settle in a tree for a time. This and No. 31 were both got with one shot but unfortunately No. 43 only had a wing broken. It fluttered away along the ground with the remainder of the flock flying round and swooping down on it just as rooks and jackdaws will do when one of their number is wounded. I have not seen this bird before. No. 43 brought in by a native. Not uncommon in open country and cultivated land; always seen in flocks. Crop full of seeds [C.].

Not recorded from Burma before, though it occurs in Yunnan, on the Lichiang Range (Forrest).

Emberiza pusilla Little Bunting.

19 ♂ February 13, 40 ♀ March 1, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

No. 19 brought in by a native, crop full of seed; No. 40 fairly common on cultivated land and open country [C.].

Stanford obtained two females at Hopin in the plains of the Myitkyina District in 1932.

Motacilla alba leucopsis White-faced Wagtail.

67 ♂ March 23, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Two seen together. I have seen no others nor noticed this wagtail before [C.]. Harington mentions this bird as occurring in the Bhamo District.

Motacilla cinerea caspica Eastern Grey Wagtail.

96 ♂ April 22, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Not seen before [C.].

Motacilla citreola calcarata Hodgson's Yellow-headed Wagtail.

100 ♂ May 1, 101 ♀ May 2, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

No. 100. One of a flock shot in open. First seen about a week ago. N. 101. One of a pair, the other similar to No. 100 [C.].

Anthus hodgsoni Indian Tree Pipit.

13 ♂ February 9, 27, 28 ♂ February 19, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Very common on the flat open bracken covered valley bottom. Crop full of seeds [C.].

Anthus roseatus Hodgson's Pipit.

128 ♂ June 23, Adung Valley 28°20' N., 97°45' E., 12,000 ft.; 147 [♀] July 21, Adung Valley 28°20' N., 97°40' E., 12,000 ft.

Shot in open meadow above tree line, seems fairly common [C.].

According to the *Fauna* this bird is said to occur in the Northern Shan States but there are no specimens in the Museum from anywhere in Burma.

Æthopyga ignicauda exultans Yunnan Fire-tailed Sunbird.

129 ♂ June 25, Adung Valley 28°20' N., 97°45' E., 13,000 ft.

Very common amongst the scrub rhododendron, juniper etc. above the tree limit. I have not actually seen it in the forest yet [C.].

This race of the Fire-tailed Sunbird was included in the *Fauna*, although it had not actually been recorded from within the limits dealt with. There is however a female in the Museum collection obtained by Rippon in the Kauri Kachin District. It is rather dark in colour, as are many of that collector's specimens, owing to his methods of drying! Salvadori recorded *ignicauda* from Bhamo.

Five birds from Yunnan in the British Museum were separated from the typical race by Stuart Baker as *A. i. exultans* on account of the deeper crimson of the upper side, deeper yellow below, greater extent of red on the breast and larger bills. A male from Kumaon and two from Nepal are certainly paler than the Yunnan birds, but in over eighteen from Sikkim and Assam a few are the same as the Nepal birds while the majority are darker and resemble very closely the Yunnan specimens, indeed, if these last were better prepared I doubt much whether they could be distinguished from them. In the yellow colour of the underside I can see no difference and in three out of the five Yunnan specimens the red on the breast is in no way different to Sikkim examples, but in the remaining two, the type and another, the red on the breast is brighter and of greater extent. The bills according to Baker measure *A. i. ignicauda* 17-19 mm, *A. i. exultans* 19-21 mm., but I find there is no difference my measurements being 17.5-19.5 mm. and 18-19.5 mm. respectively.

Æthopyga dabryi Dabry's Sunbird.

72 ♂ March 27, 91 ♂ April 16, Adung Valley 28°10' N., 97°40' E.

Not so common as *Æ. nepalensis nepalensis* [C.].

Æthopyga nipalensis nipalensis Nepal Yellow-backed Sunbird.

11 ♂ February 6, 18 ♀ February 13, 35 ♂ February 24, 69 ♂ March 23, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Very common. No. 69 shot with a crossbow. These little birds are very common and equally confiding, so are a ready prey for small boys with a crossbow [C.].

March 22. Saw Sunbird visiting *Rhododendron stenautus* [K. W.].

Hypopicus hyperythrus sikkimensis Eastern Rufous-bellied Woodpecker.

108 ♂ May 16, 116 ♀ May 29, 119 [♀] June 2, Adung Valley 28°15' N., 97°40' E., 7,500-8,000 ft.; 155 ♂ October 11, Adung Valley 28°15' N., 97°40' E., 6,000 ft.

In the *Fauna* this Woodpecker is not recorded further south in Burma than the Kachin Hills but there are in the British Museum specimens from Maymyo (Harington), Kalaw (Craddock, Thompson, Oates and Venning), Tonghoo (Hargett collection) and S.-W. Yunnan (Wingate). In addition it has been recorded from Mt. Victoria by Wood, the Chin Hills by Hopwood and Mackenzie and various localities in the S. Shan States by Bingham and Cook.

Dryobates cathpharius tenebrosus Yunnan Red-breasted Pied Woodpecker.

Dryobates cathpharius tenebrosus Rothschild Nov. Zool. 1926, xxxiii, p. 240—Shweli-Salwin Divide.

21 ♀ February 16, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Habits are much more like a Tree Creeper, flying from dead tree to dead tree and searching each one methodically. The call is loud for the size of the bird and is a rather monotonous chip, uttered at intervals when searching a tree and rather more quickly when flying. Not uncommon, I have seen three or four during the last ten days [C.].

This single specimen belongs to the race described by Lord Rothschild from Yunnan which differs from *D. cathpharius* in the less yellowish, more greyish

underside, which is much more heavily spotted with black'. From *D. c. pernai* Verreaux (Rev. et Mag. Zool. 1867, p. 271) from Kansu this race is distinguished by the smaller size and lesser amount of black on the breast and malar streaks, while compared with *D. c. pyrrhotorax* Hume (Manipur and Naga Hills) it has a greater amount of black on the underside and also is larger. In addition to the female listed above we have two males collected by Forrest on his last expedition in Yunnan, a male from the Yangtze big Bend (Rippon) and others from Na Noi, Loi Maw and the hills east of Fort Stedman in the S. Shan States (Craddock and Rippon).

Measurements:—

		Wing.	Bill from base of skull.		Wing.	Bill.
<i>D. c. cathpharius</i>	4 ♂	100-102	18.5-20	4 ♀	97-102	17.5-20
<i>D. c. pyrrhotorax</i>	4 ♂	97-99	18.5-20	1 ♀	97	18.5
<i>D. c. tenebrosus</i>	5 ♂	97.5-104	19-21.5	4 ♀	99-104	18.5-20
<i>D. c. pernyi</i>		111-112	20.5	—	—	—

Dryobates darjellensis Darjeeling Pied Woodpecker.

114 ♀ May 27, Adung Valley 28°15' N., 97°40' E., 8,000 ft.

Shot in jungle, not uncommon [C.].

This Woodpecker in the *Fauna* is stated to be found in Burma—the Chin and Kachin Hills, and Shan States. It is however not represented in the Museum from the Shan States or Kachin Hills and I cannot find any record of its occurrence there, though we have specimens from Tonghoo.

Sasia ochracea ochracea The Indian Rufous Piculet.

2 ? December 2, 1930, Kadrangyang, 70 miles N. of Myitkyina, 2,000 ft.

Habits like any woodpecker tapping slowly and then tearing off slivers with its beak. Mainly seen on dead bamboo and tall grasses—common [C.].

This single example belongs to the typical race, which is found from Nepal to Suddya and south to the Kauri Kachin District, whence Rippon obtained an example. Harington records it nesting in the Bhamo District. *S. o. querulivox* Baker, Assam S. of the Brahmapootra, Naga Hills, Manipur, Lower Chindwin and S. Shan States, is intermediate between the typical race and *S. o. reichenowi* Hesse a pale bird found in Tenasserim—as far south as the Pakschan estuary—Tonghoo and S. Annam.

Some examples of *S. o. querulivox* are very pale, indeed four skins in the museum from the Khasia Hills are barely separable from Tenasserim specimens.

Cuculus poliocephalus poliocephalus Small Cuckoo.

107 ♂ May 14, Adung Valley 28°10' N., 97°40' E., 7,500 ft.

I heard this bird for some weeks, but have not been able to see it before. It has a particularly maddening and monotonous call, rather like the expostulations of a very young hen with a treble voice, which has just escaped being run over by a car, repeated at short intervals for hours! [C.].

Rippon obtained a specimen in the Kauri Kachin District in July and Harington lists it as occurring in the Bhamo District. Probably this cuckoo breeds in the N.-W. Yunnan mountains as Forrest collected examples between May and August on the Lichiang Range and the Tengyeh Valley.

Upupa epops longirostris Burmese Hoopoe.

87? April, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Only seen during the last few days and then only twice [C.].

Pyrotrogon erythrocephalus erythrocephalus Red-headed Trogon.

5 ♂ January 9, Nam Tamai 4,000 ft.

Fairly common [C.].

Collocalia brevirostris pellos Szechewan Swiftlet.

Collocalia inopina pellos Thayer and Bangs, Mem. Mus. Comp. Zool. Harvard., xl, p. 158 (1912)—Waschan, Szechuan.

65? March 15, Adung Valley 28°10' N., 97°40' E., 8,000 ft.

February 25. Swifts seen tonight for the first time; 28 February seen again just before sundown; 14 March. Seen flying very high tonight. No. 65.

This is the bird referred to above as 'swift'—a great number seen today—15 March—all flying low. Also in Tibet 28°25' N., 97°55' E., September.

We have in the Museum only four specimens of this bird—in addition to the above specimen in the Museum as follows: Tonkin (Stevens) recorded by me as *C. inominator* (!); adult and juvenile Omi-hsien, S. Szechuan (M. P. Anderson) and an adult (labelled juvenile) from the Mekong-Salwin Divide (Forrest), which was recorded as *C. f. brevirostris* by Lord Rothschild. To the west this race of swiftlet is replaced by *C. b. brevirostris*, which ranges from Eastern Assam and Manipur to Dalhousie, and differs in its smaller size.

Glaucidium cuculoides rufescens Burmese Barred Owlet.

160 ? November 29, 1931, Nam Tamai.

Trapped and brought in by natives [C.].

Ducula badia griseicapilla Grey-headed Imperial Pigeon.

Ducula badia griseicapilla.

3 ♂ December 11, 1930, Kachin Hills, 150 miles N. of Myitkyina.

Recorded by Harington from Bhamo District. Apparently this pigeon does not extend into Northern Yunnan as neither Forrest nor Rippon collected specimens, though Wingate obtained a single male at S.-W. Yunnan.

Columba leuconota gradaria Hartert, Eastern Snow Pigeon.

131 ♀ June 25, Adung Valley 28°20' N., 97°45' E., 14,000 ft.; 141-2 ♀ July 8, Adung Valley 97°40' E., 13,000 ft.

No. 131 one of a pair, the other of which flew away and settled on a stone slide, where its colouration, which was rather conspicuous on the grass, merged perfectly with the background.

July 8. Climbed to about 15,000 ft. and saw several pigeons similar to No. 131 and by a really fine effort succeeded in killing three out of a flock of six at one shot. Both this flock and two others, which I saw were, feeding on open screes between 13 and 15,000 ft. July 9. Another flock of pigeons, similar to those seen yesterday, seen at about 14,000 ft. These pigeons are almost always seen on stony screes feeding, though occasionally they are to be seen on the grass when they are very conspicuous. In flight their white bodies show up in marked contrast to their dark wings [C.]. No. 131. Crop full of small bulbils of the pink *Polygonum* and a few seeds of *Morina* [K. W.].

This pigeon has not previously been recorded from Burma and Forrest sent no specimens from Yunnan, though further north it occurs in that country on the Yangtse, where Dr. Rock obtained examples, which according to Riley (P.U.S.N.M. 80, p. 15, 1931) are somewhat intermediate in colour between *C. l. leuconota* and *C. l. gradaria* Hartert from Szechuan.

Gennæus horsfieldi horsfieldi Black-breasted Kalij.

4 ♂ December 23, 1930, Hkampti Plains, Upper Burma, 1,500 ft.

This and a companion were seen together at close range and both seemed identical. They walked about making a low clucking noise.

Rippon and others obtained this pheasant in the Bhamo District where it appears to be not uncommon.

Lophophorus sclateri Sclater's Monal.

153, 154 ♀ juv. August 19, Adung Valley 28°20' N., 97°45' E., 13,000 ft.

August 17, Monal heard calling at 13,000 ft. amongst scrub and cliffs above the tree limit. I could not see them because of the mist and rain, though they sounded quite near. August 19, high up above the tree line I saw a flock of monal and after a difficult stalk managed to get within range and shot two. One bird in the flock (the cock ?) was much bigger than the two I shot and had the blue round the eye more pronounced, but otherwise appeared very similar. These birds seem to keep very much to the same locality: during the two months we have been here I have found two places where these birds live and never have been there without either seeing or hearing them. They are very cunning, one of the flock always seems to be on guard on some ridge or prominent mound and gives away their position by uttering the rather harsh alarm call (rather like a mixture between that of a peacock and a guinea fowl), otherwise they would probably escape unobserved as their colouration

harmonizes admirably with their haunts among the dwarf rhododendron, juniper, cotoneaster, grass etc. Nos. 153-154 contained *Polygonum* seeds and heads of some thistle or hard-headed flower in their crops [C.].

July 10. Saw a pair of Monal and then saw and heard six or eight higher up on the grey scree. Two sentinels stood on rocks uttering their shrill, rather plaintive alarm call, a single cry repeated again and again while the others strutted up the scree together.

Baker does not give this Monal as occurring in Burma, though in the donation list of the Society, vol. xxiii, p. 592, there is a record that Mr. F. C. Lewis presented three from the Burmo-Chinese frontier. These came from the Htawgaw Hills, between the Kachin Hills and Yunnan, in the cold weather of 1914 and Capt. Kingdon Ward has recorded it from Imam Bum in the same Hills (*Journal* 1921, xxvii, p. 756). Later in 1925 the late Capt. West shot two males near Myitkyina in October which are now in the National Collection. Capt. Kingdon Ward, on his 1924 plant collecting expedition down the Tsangpo, obtained a male in juvenile plumage and an adult female at the Po-Tsangpo and Tsangpo confluence at 9,000 ft. on February 14. Lord Rothschild records (Nov. Zool. 1926, p. 211) that Forrest obtained a young male which he says 'is so far unique' but does not give any description of it and I therefore add one of Capt. Kingdon Ward's bird. Differs from the adult female in the darker colour of the mantle, the paler, more white, colour of the lower back, rump and upper tail coverts and in the greater amount of cinnamon on the tail feathers, which colour is entirely absent from the adult from the Tsangpo, but present in slight frecklings in a bird from the Mishmi country and figured in P.Z.S. 1879, pl. li. The upper side of the young male is narrowly barred with faint cinnamon bands instead of frecklings. On the breast and neck the black feathers of the adult are beginning to appear and a few metallic feathers to show on the head.

Tragopan temmincki Temminck's Tragopan.

82 ♂ June 7, Adung Valley 28°10' N., 97°40' E., 7,000 ft.

Bill black; feet flesh; iris slate; round eye, throat and hams bright cobalt blue.

Brought in by a native trapped in the jungle [C.]

According to Oates (*J.B.N.H.S.*, xix, p. 260) Lt. C. M. Macmillan shot a male of this Tragopan in 1903 at Sadon, due East of Myitkyina at an elevation of about 9,000 ft., and in March 1904 Mr. W. Scott shot two examples on the Pansing Pass near the same place. In the cold weather of 1914 Mr. F. C. Lewis obtained a male near Htawgaw, while we have in the British Museum a pair procured by Major Burd in the Myitkyina District in October 1925, and another got by Capt. West near Hipmaw in October 1925 and it appears therefore that this Tragopan is not uncommon in N.-E. Burma. In addition to the specimens obtained by Co. F. M. Bailey in the Mishmi country and S. Tibet (Op. cit., vol. xxiv, p. 76) it should be mentioned that Capt. Kingdon Ward collected a young male on December 16, 1924, at the confluence of the Po-Tsangpo and Tsangpo in S.-E. Tibet.

All the western examples of this Tragopan I have examined are rather darker below and of a less brick red than Chinese birds and in size tend to run larger, wing 243, 254, 260, 263 mm. as against 230-253 in fourteen Yunnan and Szechuan birds.

Tragopan temmincki was first made known to science by Dr. J. E. Gray in the *Illustrations of Indian Zoology*, vol. i, plate 50 (December 2, 1831) and the bird from which the drawing was made was presented along with a second male to the British Museum by J. R. Reeves. Gould (*Birds of Asia*, vol. vii, pl. 47) tells us that Reeves first saw this species in the aviary of a Mr. Beal in Macao and 'did not rest until he had sent specimens to the National Collection'. On May 13, 1834 Dr. G. Bennett exhibited before a meeting of the Zoological Society a drawing of one of Mr. Beal's birds and stated that they came from 'the province of Yunnan bordering on Tibet', adding that Mr. Beal had not been able to obtain any female specimens.

Ithaginis cruentus kuseri Yunnan Blood-Pheasant.

74 ♀ March 31, Adung Valley 28°10' N., 97°40' E., 8,000 ft.; 126 ♂ April 20, 142, 145 ♂, ♀ July 10, Adung Valley 28°45' N., 97°45' E., 12,000 ft.

No. 74 shot sitting on a pile of logs. No. 142 shot in forest, alarm call like a hen common pheasant. One of a pair, the other ran about mewing for some time, but I could not see it. July 10. I saw two pairs of Blood pheasants, each pair walking about together with a well grown family. The young were, I should say, at least six weeks old and were in the forest at about 12,000 ft. August 19. Today came across a family party of Blood pheasants. Shot the cock and a young hen, the latter the size of a French partridge. The party consisted of six or seven and I had to follow them through the forest before I could get a second. All the time they kept 30-40 yards away and continually uttered their alarm call, though occasionally they would stop to pick up food [C.].

July 27. Alpine Valley. In the forest I saw a pair of Blood pheasants. The female has a crest and strutted about, with tail outspread bobbing her head abruptly to pick up food as she walked, then throwing it up suddenly and all the time she uttered a single rather querulous cry. The male has the same upright way of pecking at the ground and looking up quickly. His tail however was not spread. October 4. In forest below ridge (area 19,000 ft.) I saw a whole party of Blood pheasants—at least eight—they were certainly two cocks. The cock gives a shrill cry of alarm, runs a short distance, then stops, the rest of the covey also. As often as not they stand on an eminence and look at you from some twenty to thirty yards away. They seem to be bewildered and run hither and thither, but never go far. The cock struts and runs with his tail outspread. On October 30 a large family of Blood pheasants visited the camp and five were shot, but the remainder took very little notice and were scarcely alarmed, continuing to squawk and run this way and that [K. W.].

In the *Fauna*, this Blood Pheasant is said 'to inhabit Yunnan on the Shweli-Salwin Divide; extending west to Mishmi and Abor Hills and north and east to the Dihong and Brahmapootra rivers.' We have in the British Museum the following specimens: ♂ Tsekou, Yunnan (P. R. Soule); Tengyueh, Yunnan (E. B. Howell); ♀ (2 ♂ also obtained) near Htawgaw Hills, between Kachin Hills and Yunnan cold weather 1914 (F. C. Lewis) 4 ♂, 1 ♀ Hipmau, Myitkyina District October 1925 (West); 2 ♂, 1 ♀ Seinghku Valley 10,000 ft., 28°8' N., 97°24' E., May, June and October, 1926 (F. Kingdon Ward); 6 ♂, ♀, Tsu R., Mishmi Hills and Sumdo, S. Tibet (F. M. Bailey).

Two males of *I. e. clarkei* collected by Forrest on the Lichiang Range approach *I. c. kuseri* and have the throat and breast washed buff, intermingled with numerous red feathers. I have followed Lord Rothschild in considering all the Blood Pheasants as races of *I. cruentus* Hardwick from Nepal.

***Tringa hypoleucos* Common Sandpiper.**

1 ? November 30, 1930, Tiang Zup 50 miles N. of Myitkyina.
Seen on several occasions.

***Phalacrocorax carbo sinensis* Chinese Cormorant.**

80 ♀ April 7, Adung Valley 28°10' N., 97°41' E., 6,000 ft.

Shot sitting on a log in the river and seen fairly often during the last three weeks, but not before. Unexpectedly good eating! Several more also seen [C.].

***Anas crecca crecca* Common Teal.**

39 ♀ February 27, Adung Valley 28°10' N., 97°40' E., 6,000 ft.

Shot at dusk in a small muddy backwater off the Mai river. I have not seen this duck before [C.].